ARTICLE VIII - PROSECUTION AND PROGRESS

8.1 Notice to Proceed (NTP). A notice to proceed will be issued to the Contractor. It shall establish the date the Contractor is expected to start work and from which contract time will commence.

The Engineer will consult with the Contractor in an effort to set a mutually agreeable notice to proceed date. When the notice to proceed date is set by mutual agreement, Contractor shall have no claim for delay impact costs resulting from the issuance of the notice to proceed for such date.

In the absence of an agreed notice to proceed date, the Engineer will issue a notice to proceed to the Contractor for a date convenient to the State. In the event that the Engineer establishes a starting date that is more than 90 days after the effective date of the contract, the Contractor may not terminate the contract for a default by the State but may submit a claim in accordance with Section 7.16 Disputes and Claims for increased labor and material costs which are directly attributable to the delay beyond the first 90 days. The Engineer may suspend the contract before issuing the notice to proceed, in which case the Contractor's remedies are exclusively those set forth in Section 8.10 Suspension of Work.

The Contractor shall begin work no later than 10 working days from the date in the notice to proceed and shall diligently prosecute the same to completion within the contract time. In the event that the Contractor fails to start the work, the Engineer may terminate the contract in accordance with Section 8.11 Termination of Contract for Cause. The Contractor shall notify the Engineer at least three working days before beginning work.

The Contractor shall notify the Engineer at least 24 hours before restarting work after a suspension of work pursuant to Section 8.10 Suspension of Work.

The Contractor shall not begin work before the date in the notice to proceed. Any work done prior to the notice to proceed date will be considered unauthorized work. If the Engineer does not direct that the unauthorized work be removed, it shall be paid for after the notice to proceed date and only if it is acceptable.

When construction is started, the Contractor shall work expeditiously and pursue the work diligently until it is complete. If a portion of the work is to be done in stages, the Contractor shall leave the area safe and usable for the user agency at the end of each stage.

8.2 Prosecution of Work. Unless otherwise permitted by the Engineer in writing, the Contractor shall not commence with physical construction unless sufficient materials and equipment are available for either continuous construction or completion of a specified portion of the work.

8.3 Preconstruction Data Submittal. The awardee shall submit to the Engineer, for information and review, the preconstruction data within 30 days after the execution of the contract. Until the items listed below are received and found acceptable by the Engineer, the Contractor shall not commence work unless otherwise authorized to do so in writing and subject to such conditions set by the Engineer. No progress payment will be made to the Contractor until the Engineer acknowledges, in writing, receipt of the following preconstruction data submittals acceptable to the Engineer:

(1) List of the Superintendent and other Supervisory Personnel.

(2) Name of person(s) authorized to sign for the Contractor.

(3) Work Schedule.

64		(4)	Initial	Progress	Schedule	(See	Section	8.6	Progress
65		Sched	lules).						
66									
67		(5)	Water	Pollution a	nd Siltation	Contro	l Submitta	ıls.	
68									
69		(6)	Solid \	Waste Disp	osal form.				
70									
71		(7)	Tax Ra	ates.					
72									
73		(8)	Insura	nce Rates.					
74									
75		(9)	Certific	cate of Ir	nsurance,	satisfac	ctory to	the	Engineer,
76		indica	ting tha	at the Cont	ractor has i	n place	e all insur	rance	coverage
77		requir	ed by th	ne contract	documents.				
78									
79		(10)	Sched	ule of Value	es.				
80									
81		(11)	List of	suppliers.					
82									
83		(12)	Shop	drawings ar	nd material o	data sh	eets.		
84									
85		(13)	Other	submittals a	as directed l	by the I	Engineer.		
86									
87	8.4 Chara	cter a	nd Pro	ficiency o	f Workers.	Th	ne Contra	ctor s	shall at all
88	times provid	e ade	quate	supervision	and suffic	cient la	abor and	equi	oment for
89	prosecuting t	he wor	k to full	completion	n in the man	ner an	d within th	ne tim	e required
90	by the conti	act.	The s	uperintende	ent and all	l other	represer	ntativ	es of the
91	Contractor sh	all act	in a civ	il and hone	est manner i	n all de	alings wit	h the	Engineer,

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all other State officials and representatives, and the public in connection with the

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work.

All workers shall possess the proper license, certification, job classification, skill, training, and experience necessary to properly perform the work assigned to them.

The Engineer may direct the removal of any worker(s) who does not carry out the assigned work in a proper and skillful manner or who is disrespectful, intemperate, violent, or disorderly. The worker shall be removed forthwith by the Contractor and will not work again without the written permission of the Engineer.

8.5 Contract Time.

(a) Calculation of Contract Time. When the contract time is on a working day basis, the total contract time allowed for the performance of the work will be the number of working days shown in the contract plus any additional working days authorized in writing as provided hereinafter. The count of elapsed working days to be charged against contract time, will begin from the date of notice to proceed and will continue consecutively to the date of substantial completion. When multiple shifts are used to perform the work, the State will not consider the hours worked over the normal eight working hours per day or night as an additional working day.

Whenever the Engineer provides the Contractor with a written statement of elapsed working days, the Contractor may file a written protest with the Engineer setting forth, in detail, the basis of the protest, not later then seven days after receiving the statement. Failure of the Contractor to file such a protest shall be deemed an acceptance by the Contractor of the correctness of the statement.

When the contract is on a calendar day basis, the total contract time allowed for the performance of the work will be the number of days shown in the contract plus any additional days authorized in writing as provided

hereinafter. The count of elapsed days to be charged against contract time will begin from the date of notice to proceed and will continue consecutively to the date of substantial completion. The Engineer will exclude days elapsing between the orders of the Engineer to suspend work and resume work for suspensions not the fault of the Contractor.

(b) Modifications of Contract Time. Whenever the Contractor believes that an extension of contract time is justified, the Contractor shall serve written notice on the Engineer not more than five working days after the occurrence of the event that causes a delay or justifies a contract time extension. The Engineer may grant an extension of contract time for any discrete part of the work affected by the delay(s) while, at the same time, keeping the existing completion date in place or modifying it separately for the remainder of the work not affected by the delay. Contract time may be adjusted for the following reasons or events but only if and to the extent the critical path has been affected:

Caused by the State. If the Contractor believes that an extension of time is justified on account of any act or omission by the State, and is not adequately provided for in a field order or change order, it must request the additional time as provided above. At the request of the Engineer, the Contractor must show how the critical path will be affected and must also support the time extension request with schedules as well as statements from its subcontractors, suppliers, or manufacturers, as necessary. Claims for compensation for any altered or additional work will be determined pursuant to Section 4.2 Changes.

Additional time to perform the extra work, to the extent such work affects the critical path, will be added to the time allowed in the contract for the completion of the project, or the Engineer may

 limit the extension to only the portion of the project work affected by the delay, without regard to the date the change directive was issued, even if the contract completion date has passed. A change requiring additional time issued after contract time has expired will not constitute an excusal or waiver of pre-existing Contractor delay.

(2) Delay for Permits. For delays in the routine application and processing time required to obtain necessary permits, including permits to be obtained from State agencies, on the condition that the delay is not caused by the Contractor and, provided that, as soon as the delay occurs, the Contractor notifies the Engineer in writing that the permits are not available. Time extensions will be the exclusive relief granted and no additional compensation will be paid the Contractor on account of such delays.

- (3) Delays Beyond Contractor's Control. For delays caused by acts of God, a public enemy, fire, inclement weather days or adverse conditions resulting therefrom, earthquakes, floods, epidemics, quarantine restrictions, labor disputes impacting the Contractor or the State, freight embargoes, and other reasons beyond the Contractor's control, the Contractor may be granted an extension of time provided that:
 - (A) In the written notice of delay to the Engineer, the Contractor describes possible effects on the completion date of the contract. The description of delays shall:
 - (i) State specifically the reason or reasons for the delay and fully explain in a detailed chronology how the delay affects the critical path.

190	(ii) Include copies of pertinent documentation to
191	support the time extension request.
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193	(iii) Cite the anticipated period of delay and the time
194	extension requested.
195	
196	(iv) State either that the above circumstances have
197	been cleared and normal working conditions restored
198	as of a certain day or that the above circumstances
199	will continue to prevent completion of the project.
200	
201	(B) The Contractor shall notify the Engineer in writing
202	when the delay ends. Time extensions will be the exclusive
203	relief granted and no additional compensation will be paid
204	the Contractor for such delays.
205	
206	(4) Delays in Delivery of Materials or Equipment. For
207	delays in delivery of materials or equipment, which occur as a result
208	of unforeseeable causes beyond the control and without fault of the
209	$Contractor, its \ subcontractor(s), \ or \ supplier(s), \ time \ extensions \ shall$
210	be the exclusive relief granted and no additional compensation will
211	be paid the Contractor on account of such delay. The delay shall
212	not exceed the difference between the originally scheduled delivery
213	date and the actual delivery date. The Contractor may be granted
214	an extension of time provided that it complies with the following
215	procedures:
216	
217	(A) The Contractor's written notice to the Engineer must
218	describe the delays and state the effect such delays may
219	have on the critical path.
220	

- **(B)** The Contractor, if requested, must submit to the Engineer, within five days after a firm delivery date for the material and equipment is established, a written statement regarding the delay. The Contractor must justify the delay as follows:
 - (i) State specifically all reasons for the delay. Explain in a detailed chronology the effect of the delay on the critical path.
 - (ii) Submit copies of purchase order(s), factory invoice(s), bill(s) of lading, shipping manifest(s), delivery tag(s), and any other documents to support the time extension request.
 - (iii) Cite the start and end date of the delay and the time extension requested.
- of the work is totally suspended for one or more days (calendar or working days, as appropriate) by order of the Engineer in accordance with Subsections 8.10(a)(1), 8.10(a)(2), 8.10(a)(3) or 8.10(a)(5), the number of days from the effective date of the Engineer's order to suspend operations to the effective date of the Engineer's order to resume operations shall not be counted as contract time, and the contract completion date will be adjusted. During periods of partial suspensions of the work, the Contractor will be granted a time extension only if the partial suspension affects the critical path. If the Contractor believes that an extension of time is justified for a partial suspension of work, it must request the extension in writing at least five working days before the partial suspension will affect the critical path operation(s) in progress. The

253 Contractor must show how the critical path was affected based on 254 the status of the work and must also support its claim, if requested, 255 with statements from its subcontractors. A suspension of work will 256 not constitute a waiver of pre-existing Contractor delay. 257 258 (6) **Contractor Caused Delays.** No time extension will be 259 granted under the following circumstances: 260 261 (A) Delays within the Contractor's control in performing 262 the work caused by the Contractor, subcontractor, supplier, 263 or any combination thereof. 264 265 (B) Delays within the Contractor's control in arrival of 266 materials and equipment caused by the Contractor, subcontractor, supplier, or any combination thereof, in 267 268 ordering, fabricating, and delivery. 269 270 (C) Delays requested for changes which do not affect the 271 critical path. 272 273 (D) Delays caused by the failure of the Contractor to 274 make submittals in a timely manner for review and 275 acceptance by the Engineer, such as, but not limited to, 276 shop drawings, descriptive sheets, material samples, and 277 color samples except as covered in Subsection 8.5(b)(3) and 278 8.5(b)(4). 279 280 (E) Delays caused by the failure to submit sufficient 281 information and data in a timely manner in the proper form in 282 order to obtain necessary permits related to the work. 283

284		(F) Failure to follow the procedure within the time allowed
285		by contract to request a time extension.
286		
287		(G) Failure of the Contractor to provide evidence sufficient
288		to support the time extension request.
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290		(7) Reduction in Time. If the State deletes or modifies any
291		portion of the work, an appropriate reduction of contract time may
292		be made in accordance with Section 4.2 Changes.
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294	8.6	Progress Schedules.
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296		(a) Forms of Schedule. All schedules shall be submitted using the
297		specific computer program designated in the bid documents or as directed
298		by the Engineer.
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300		Schedule submittals shall be as follows:
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302		(1) For Contracts \$2,000,000 or Less or For Contract Time
303		100 Working Days or 140 Calendar Days or less. For
304		contracts of \$2,000,000 or less or for contract time of 100 working
305		days or 140 calendar days or less, the progress schedule will be a
306		Time Scaled Logic Diagram (TSLD). The Contractor shall submit a
307		TSLD submittal package and it shall meet the following
308		requirements and have these essential and distinctive elements:
309		
310		(A) The major features of work shown in the chronological
311		order in which the Contractor proposes to work that feature
312		of work and its location on the project. The schedule shall
313		account for normal inclement weather, unusual soil, or other
314		conditions that may influence the progress of the work,
315		schedules, and coordination required by any utility, off or on

316 site fabrications, and other pertinent factors that relate to 317 progress. 318 319 All features listed or not listed in the contract (B) 320 documents that the Contractor considers a controlling factor 321 for the timely completion of the contract work. 322 323 (C) The time span and sequence of the activities or 324 events for each feature, and its interrelationship and 325 interdependencies in time and logic to other features in order 326 to complete the project. 327 328 (D) The total anticipated time necessary to complete work 329 required by the contract. 330 331 (E) Identification of the critical path i.e. a chronological 332 listing of critical intermediate dates or time periods for 333 features or milestones or phases that can affect timely 334 completion of the project. 335 (F) Major activities related to the location on the project. 336 337 338 Non-construction activities, such as submittal and (G) 339 acceptance periods for shop drawings and material, 340 procurement, testing, fabrication, mobilization. and 341 demobilization or order dates of long lead material. 342 343 (H) Set schedule logic for out of sequence activities to 344 retain logic. In addition, open ends shall be non-critical. 345 346 Show target bars for all activities. **(I)** 347

348	(J) Vertical and horizontal sight lines both major and
349	minor shall be used as well as a separator line between
350	groups. The Engineer will determine frequency and style.
351	
352	(K) The file name, print date, revision number, data, and
353	project title and number shall be included in the title block.
354	
355	(L) Have columns with the appropriate data in them for
356	activity ID, description, original duration, remaining duration,
357	early start, early finish, total float, percent complete, and
358	resources. The resource column shall list who is responsible
359	for the work to be done in the activity. These columns shall
360	be to the left of the bar chart.
361	
362	(2) For Contracts More Than \$2,000,000 or For Contract
363	Time of More Than 100 Working Days or 140 Calendar Days.
364	For contracts which have a contract amount more than \$2,000,000
365	or contract time of more than 100 working days or 140 calendar
366	days, the Contractor shall submit a Timed-Scaled Logic Diagram
367	(TSLD) and it shall meet the following requirements and have these
368	essential and distinctive elements:
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370	(A) The information and requirements listed in (1) above.
371	
372	(B) Additional reports and graphics available from the
373	software as requested by the Engineer.
374	
375	(C) Sufficient detail to allow at least weekly monitoring of
376	the Contractor and subcontractor's operations.
377	
378	(D) The time scaled schematic shall be on a calendar or
379	working days basis. What will be used shall be determined

380 by how the contract keeps track of time. It will be the same. 381 Plot the critical calendar dates anticipated. 382 383 (E) Breakdown of activity, such as forming, placing 384 reinforcing steel, concrete pouring and curing, and stripping 385 in concrete construction. Indicate location of work to be 386 done in such detail that it would be easily determined where 387 work would be occurring within approximately 200 feet. 388 389 (F) Latest start and finish dates for critical path activities. 390 391 (G) Identify responsible subcontractor, supplier, 392 others for their respective activity. 393 394 (H) No individual activity shall have duration of more than 395 20 calendar days unless requested and approved by the 396 Engineer. 397 398 **(I)** All activities shall have work breakdown structure 399 codes and activity codes. The activity codes shall have 400 coding that incorporates information for phase, location, who 401 is responsible for doing work, type of operation, and activity 402 description. 403 404 (J) Incorporate all physical access and availability 405 restraints. 406 407 (b) **Inspection and Testing.** All schedules shall provide reasonable 408 time and opportunity for the Engineer to inspect and test each work 409 activity. 410

(c) Engineer's Acceptance of Progress Schedule. The submittal of and the Engineer's receipt of any progress schedule shall not be deemed an agreement to modify any terms or conditions of the contract. Any modifications to the contract terms and conditions that appear in or may be inferred from an acceptable schedule will not be valid or enforceable unless and until the Engineer exercises discretion to issue an appropriate change order. Nor shall any submittal or receipt imply the Engineer's approval of the schedule's breakdown, its individual elements, or any critical path that may be shown; nor shall it obligate the State to make its personnel available outside normal working hours or the working hours established by the Contract in order to accommodate such schedule. The Contractor has the risk of all elements (whether or not shown) of the schedule and its execution. No claim for additional compensation, time, or both, shall be made by the Contractor or recognized by the Engineer for delays during any period for which an acceptable progress schedule or an updated progress schedule, as required by Subsection 8.6(e) Contractor's Continuing Schedule Submittal Requirements, had not been submitted. Any acceptance or approval of the schedule shall be for general format only and shall not be deemed an agreement by the State that the construction means, methods, and resources shown on the schedule will result in work that conforms to the contract requirements or that the sequences or durations indicated are feasible.

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(d) Initial Progress Schedule. The Contractor shall submit an initial progress schedule. The initial progress schedule shall consist of the following:

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(1) Four sets of the TSLD schedule.

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(2) All the software files and data to re-create the TSLD in a computerized software format as specified by the Engineer.

443			
444	(3) A listi	na of e	equipment that is anticipated to be used on the
445	` '	Ŭ	ne type, size, make, year of manufacture, and all
446		•	ary to identify the equipment in the Rental Rate
447			struction Equipment.
448			
449	(4) An a	anticipa	ated manpower requirement graph plotting
450	` '	•	total manpower requirement. This may be
451			the payment graph.
452			1 , 3 ,
453	(5) A Me	thod S	statement that is a detailed narrative describing
454	` '		ne and the method by which the work shall be
455			ach major activity.
456	•		,
457	(A)	A ma	jor activity is an activity that meets any of the
458	follow	ing crit	reria:
459		Ü	
460		(i)	Has a duration longer than five days;
461		.,	
462		(ii)	Is a milestone activity;
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464		(iii)	Is a contract item that exceeds \$10,000 on the
465		Propo	osal Schedule;
466			
467		(iv)	Is a critical path activity; or
468			
469		(v)	Is an activity designated as such by the
470		Engin	eer.
471			
472	(B)	Each	Method Statement shall include the following
473	items	neede	d to fulfill the schedule:
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475 (i) Quantity, type, make, and model of equipment; 476 477 (ii) The manpower to do the work, specifying worker classification; and 478 479 480 (iii) The production rate per eight hour day, or the 481 working hours established by the contract documents 482 needed to meet the time indicated on the schedule. If 483 the production rate is not for eight hours, the number 484 of working hours shall be indicated. 485 486 (6) Two sets of color time-scaled project evaluation and review 487 technique charts ("PERT") using the activity box template of Logic – 488 Early Start or such other template designated by the Engineer. 489 490 If the contract documents establish a sequence or order for the 491 work, the initial progress schedule shall conform to such sequence or 492 order. 493 494 (e) Contractor's Continuing Schedule Submittal Requirements. 495 After the acceptance of the initial TSLD and when construction starts, the 496 Contractor shall submit four plotted progress schedules, two PERT charts. 497 and reports on all construction activities every two weeks (bi-weekly). 498 This scheduled bi-weekly submittal shall also include an updated version 499 of the project schedule in a computerized software format as specified by 500 the Engineer. The submittal shall have all the information needed to re-501 create that time period's TSLD plot and reports. The bi-weekly submittal 502 shall include, but is not limited to, an update of activities based on actual 503 durations, all new activities, and any changes in duration or start or finish

dates of any activity.

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The Contractor shall submit with every update, in report form acceptable to the Engineer, a list of changes to the progress schedule since the previous schedule submittal. The Engineer may change the frequency of the submittal requirements but may not require a submittal of the schedule to be more than once a week. The Engineer may decrease the frequency of the submittal of the bi-weekly schedule.

The Contractor shall submit updates of the anticipated work completion graph, equipment listing, manpower requirement graph, or method statement when requested by the Engineer. The Contractor shall submit such updates within 4 calendar days from the date of the request by the Engineer.

The Engineer may withhold progress payments until the Contractor is in compliance with all schedule update requirements.

(f) Float. All float appearing on a schedule is a shared commodity. Float does not belong to or exist for the exclusive use or benefit of either the State or the Contractor. The State or the Contractor has the opportunity to use available float until it is depleted. Float has no monetary value.

(g) Scheduled Meetings. The Contractor shall meet with the Engineer to review the progress schedule on a periodic basis as determined by the Engineer. The Contractor shall have someone attending the meeting that can answer all questions on the TSLD and other schedule related submittals.

(h) Accelerated Schedule; Early Completion. If the Contractor submits an accelerated schedule (shorter than the contract time), the Engineer's review and acceptance of an accelerated schedule does not constitute an agreement or obligation by the State to modify the contract

time or completion date. The Contractor is solely responsible for and shall accept all risks and any delays, other than those that can be directly and solely attributable to the State, that may occur during the work until the contract completion date. The contract time or completion date is established for the benefit of the State and cannot be changed without an appropriate change order or final acceptance by the State. The State may accept the work before the completion date set by the contract but is not obligated to do so.

If the TSLD indicates an early completion of the project, the Contractor shall, upon submittal of the schedule, cooperate with the Engineer in explaining how it will be achieved. In addition, the Contractor shall submit the above explanation in writing which shall include the State's part, if any, in achieving the early completion date. Early completion of the project shall not rely on changes to the Contract Documents unless approved by the Engineer.

(i) Contractor Responsibilities. The Contractor shall promptly respond to any inquiries from the Engineer regarding any schedule submission. The Contractor shall adjust the schedule to address directives from the Engineer and shall resubmit the TSLD package to the Engineer until the Engineer finds it acceptable.

The Contractor shall perform the work in accordance with the submitted TSLD. The Engineer may require the Contractor to provide additional work forces and equipment to bring the progress of the work into conformance with the TSLD at no increase in contract price or contract time whenever the Engineer determines that the progress of the work does not insure completion within the specified contract time.

8.7 Weekly Meeting. In addition to the bi-weekly schedule meetings, the Contractor shall be available to meet once a week with the Engineer, at the time

and place as determined by the Engineer, to discuss the work and its progress including, but not limited to, the progress of the project, potential problems, coordination of work, submittals, erosion control reports, etc. The Contractor's personnel attending shall have the authority to make decisions and answer questions.

The Contractor shall bring to weekly meetings a detailed work schedule showing the next three weeks' work. The number of copies of the detailed work schedule to be submitted will be determined by the Engineer. The three-week schedule is in addition to the TSLD and shall in no way be considered as a substitute for the TSLD or vice versa. The three-week schedule shall show:

(a) All construction events, traffic control, and BMP related activities in such detail that the Engineer will be able to determine at what location and type of work will be done for any day for the next three weeks. This is for the State to use to plan its manpower requirements for that time period.

(b) The duration of all events and delays.

(c) The critical path clearly marked in red or marked in a manner that makes it clearly distinguishable from other paths and is acceptable to the Engineer.

(d) Critical submittals and requests for information (RFI's).

(e) The project title, project number, date created, period the schedule covers, Contractor's name, and creator of the schedule on each page.

Two days prior to each weekly meeting, the Contractor shall submit a list of outstanding submittals, RFIs, and issues that require discussion.

8.8 Liquidated Damages for Failure to Complete the Work or Portions of the Work on Time. The actual amount of damages resulting from the Contractor's failure to complete the contract in a timely manner is difficult to accurately determine. Therefore, the amount of such damages shall be liquidated damages as set forth herein and in the Special Provisions, Invitation for Bid, or Request for Proposal. The State may, at its discretion, deduct the amount from monies due or that may become due under the contract.

When the Contractor fails to reach substantial completion of the work for which liquidated damages are specified, within the time or times fixed in the contract or any extension thereof, in addition to all other remedies for breach that may be available to the State, the Contractor shall pay liquidated damages to the State, in the amount specified in the contract documents.

If a contract time extension is granted for part but not all of the project, the Engineer may make a reasonable apportionment of the liquidated damages amount among the different completion dates.

(a) Liquidated Damages Upon Termination. If the State terminates on account of Contractor's default, liquidated damages may be charged against the defaulting Contractor and its surety until substantial completion of work.

(b) Liquidated Damages for Failure to Complete the Punchlist.

The Contractor shall complete the work on any punchlist created after substantial completion within the contract time or any extension thereof.

When the Contractor fails to complete the work on such punchlist within the contract time or any extension thereof, the Contractor shall pay liquidated damages to the State of 20 percent of the amount of liquidated damages established for failure to substantially complete the work within

632		the contract time. Liquidated damages shall not be assessed for the
633		period between:
634		
635		(1) Substantial completion of the work and the time the punchlist
636		is delivered to the Contractor,
637		
638		(2) The date of the completion of punchlist as determined by the
639		Engineer and the date of the successful final inspection, and
640		
641		(3) The date of the inspection that results in final acceptance
642		and the receipt by the Contractor of the written notice of the final
643		acceptance.
644		
645		(c) Actual Damages Recoverable If Liquidated Damages Deemed
646		Unenforceable. In the event a court of competent jurisdiction holds that
647		any liquidated damages assessed pursuant to this contract are
648		unenforceable, the State will be entitled to recover its actual damages for
649		Contractor's failure to complete the work or any designated portion of the
650		work within the time set by the contract.
651		
652	8.9	Fines and Other Penalties. In addition to any compensatory remedies
653		available to the State arising out of the Contractor's failure to complete the
654		work by the contract completion date including, but not limited to,
655		liquidated damages, the Contractor shall reimburse the State for any fines,
656		penalties, citations, or fees levied by a third party against the State arising
657		from the late completion of the work.
658		
659	8.10	Suspension of Work.
660		
661		(a) Suspension of Work. The Engineer may, by written order,
662		suspend the performance of the work, either in whole or in part, for such
663		periods as the Engineer may deem necessary. Unless instructed

664	otherwise by the Engineer, the Contractor shall be responsible for the						
665	maintenance and protection of the work during the period of suspension.						
666	Suspension may be ordered for any cause, including, but not limited to:						
667							
668	(1) Unanticipated weather or soil conditions considered						
669	unsuitable for prosecution of the work.						
670							
671	(2) Whenever a redesign that may affect the work is deemed						
672	necessary by the Engineer.						
673							
674	(3) Unacceptable noise or dust arising from the construction,						
675	even if it does not violate any law, regulation, or permit.						
676							
677	(4) Failure on the part of the Contractor to:						
678							
679	(A) Correct conditions unsafe for the general public or for						
680	the workers.						
681							
682	(B) Carry out orders given by the Engineer.						
683							
684	(C) Perform the work in strict compliance with the						
685	provisions of the contract.						
686							
687	(D) Provide adequate supervision on the jobsite.						
688							
689	(5) The convenience of the State.						
690							
691	(b) Partial and Total Suspension. Suspension of work on some but						
692	not all items of work shall be considered a "partial suspension".						
693	Suspension of work on all items shall be considered "total suspension".						
694	The period of suspension shall be computed from the date set out in the						

written order for work to cease until the date of the order for work to resume.

(c) Reimbursement to Contractor. In the event that the Contractor is ordered by the Engineer, in writing as provided herein, to suspend work under the contract for the reasons specified in Subsections 8.10(a)(1), 8.10(a)(2), 8.10(a)(3) or 8.10(a)(5) of the "Suspension of Work" paragraph, the Contractor may be reimbursed for actual direct costs incurred on work at the jobsite, as authorized in writing by the Engineer, including costs expended for the maintenance and protection of the work. An allowance of 5 percent for indirect categories of delay costs will be paid on any reimbursed direct costs, including extended branch and home-office overhead and delay impact costs. No allowance will be made for anticipated profits. Payment for equipment which is ordered to standby during such suspension of work shall be made as described in Subsection 9.6(h) Idle and Standby Equipment.

(d) Cost Adjustment. If the performance of all or part of the work is suspended for reasons beyond the control of the Contractor, an adjustment shall be made for any increase in cost of performance of this contract (excluding profit) necessarily caused by such suspension, and the contract modified in writing accordingly.

However, no adjustment to the contract price shall be made for any suspension, delay, or interruption:

(1) For weather related conditions;

(2) To the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor; or

(3) For which an adjustment is provided for or excluded under any other provision of this Contract.
 (a) To which an adjustment is provided for or excluded under any other provision of this Contract.
 (b) Claims for Adjustment. Any adjustment in contract price made shall be determined in accordance with Sections 4.2 Changes and 4.6 Methods of Price Adjustment.

Any claims for such compensation shall be filed in writing with the Engineer within 30 days after the date of the order to resume work or the claim will not be considered. The claim shall conform to the requirements of Subsection 7.16(d) Making of a Claim. The Engineer will take the claim under consideration, may make such investigations as are deemed necessary, and will be the sole judge as to the equitability of the claim. The Engineer's decision will be final.

(f) No Adjustment. No provision of this clause shall entitle the Contractor to any adjustments for delays due to failure of its surety, the cancellation or expiration of any insurance coverage required by the contract documents, for suspensions made at the request of the Contractor, for any delay required under the contract, or for suspensions, either partial or whole, made by the Engineer under Subsection 8.10(a)(4) of the "Suspension of Work" paragraph.

8.11 Termination of Contract for Cause.

(a) Default. If the Contractor refuses or fails to perform the work, or any separable part thereof, with such diligence as will assure its completion within the time specified in this contract, or any extension thereof, or commits any other material breach of this contract, and further fails within seven days after receipt of written notice from the Engineer to commence and continue correction of the refusal or failure with diligence and promptness, the Engineer may, by written notice to the Contractor,

declare the Contractor in breach and terminate the Contractor's right to proceed with the work or the part of the work as to which there has been delay or other breach of contract. In such event, the State may take over the work, perform the same to completion, by contract or otherwise, and may take possession of, and utilize in completing the work, the materials, appliances, and plants as may be on the site of the work and necessary therefore. Whether or not the Contractor's right to proceed with the work is terminated, the Contractor and the Contractor's sureties shall be liable for any damage to the State resulting from the Contractor's refusal or failure to complete the work within the specified time.

(b) Additional Rights and Remedies. The rights and remedies of the State provided in this contract are in addition to any other rights and remedies provided by law.

(c) Costs and Charges. All costs and charges incurred by the State, together with the cost of completing the work under contract, will be deducted from any monies due or which would or might have become due to the Contractor had it been allowed to complete the work under the contract. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay the State the amount of the excess.

In case of termination, the Engineer will limit any payment to the Contractor to the part of the contract satisfactorily completed at the time of termination. Payment will not be made until the work has satisfactorily been completed and all required documents, including the tax clearance required by Section 9.11 Final Payment, are submitted by the Contractor. Termination shall not relieve the Contractor or Surety from liability for liquidated damages.

(d) Erroneous Termination for Cause. If, after notice of termination of the Contractor's right to proceed under this section, it is determined for any reason that good cause did not exist to allow the State to terminate as provided herein, the rights and obligations of the parties shall be the same as and the relief afforded the Contractor shall be limited to the provisions contained in Section 8.12 Termination for Convenience.

8.12 Termination For Convenience.

(a) Terminations. The Director may, when the interests of the State so require, terminate this contract in whole or in part, for the convenience of the State. The Director will give written notice of the termination to the Contractor specifying the part of the contract terminated and when termination becomes effective.

(b) Contractor's Obligations. The Contractor shall incur no further obligations in connection with the terminated work, and on the date set in the notice of termination, the Contractor shall stop work to the extent specified. The Contractor shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The Contractor shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work subject to the State's approval. The Engineer may direct the Contractor to assign the Contractor's right, title, and interest under terminated orders or subcontracts to the State. The Contractor must still complete the work not terminated by the notice of termination and may incur obligations as necessary to do so.

(c) Right to Construction and Goods. The Engineer may require the Contractor to transfer title and to deliver to the State in the manner and to the extent directed by the Engineer, the following:

(1) Any completed work.

(2) Any partially completed construction, goods, materials, parts, tools, dies, jigs, fixtures, drawings, information, and contract rights (hereinafter called "construction material") that the Contractor has specifically produced or specially acquired for the performance of the terminated part of this contract.

(3) The Contractor shall protect and preserve all property in the possession of the Contractor in which the State has an interest. If the Engineer does not elect to retain any such property, the Contractor shall use its best efforts to sell such property and construction materials for the State's account in accordance with the standards of Chapter 490:2-706, H.R.S.

(d) Compensation.

(1) The Contractor shall submit a termination claim specifying the amounts due because of the termination for convenience together with cost or pricing data, submitted to the extent required by Subchapter 15, Chapter 3-122, H.A.R. If the Contractor fails to file a termination claim within one year from the effective date of termination, the Engineer may pay the Contractor, if at all, an amount set in accordance with Subsection 8.12(d)(3).

(2) The Engineer and the Contractor may agree to a settlement provided the Contractor has filed a termination claim supported by cost or pricing data submitted as required and that the settlement does not exceed the total contract price plus settlement costs reduced by payments previously made by the State; the proceeds of any sales of construction, supplies, and construction materials

under Subsection 8.12(c)(3); and the proportionate contract price of the work not terminated.

- (3) Absent complete agreement, the Engineer will pay the Contractor the following amounts less any payments previously made under the contract:
 - (A) The cost of all contract work performed prior to the effective date of the notice of termination plus a 5 percent markup on the actual direct costs, including amounts paid to subcontractor, less amounts paid or to be paid for completed portions of such work. However, if it appears that the Contractor would have sustained a loss if the entire contract would have been completed, no markup shall be allowed or included, and the amount of compensation shall be reduced to reflect the anticipated rate of loss. No anticipated profit or consequential damage will be due or paid.
 - (B) Subcontractors shall be paid a markup of 10 percent on their direct job costs incurred to the date of termination. No anticipated profit or consequential damage will be due or paid to any subcontractor. These costs must not include payments made to the Contractor for subcontract work during the contract period.
 - **(C)** The total sum to be paid the Contractor shall not exceed the total contract price reduced by the amount of any sales of construction supplies and construction materials.
- (4) Cost claimed, agreed to, or established by the State shall be in accordance with Chapter 3-123, H.A.R.

8.13 Pre-Final and Final Inspections.

The procedures described herein shall apply for the entire project if there is a single completion date or to each part of the project for which there is a separate completion date. When there are two or more separate completion dates, "project" as used herein shall refer to each part of the work for which there is a separate completion date. Inspection and acceptance procedures shall be applied as described herein for each part of the project for which there is a separate completion date.

(a) Inspection Requirements. Before the Engineer undertakes a final inspection of any work, a pre-final inspection must first be conducted. The Contractor shall notify the Engineer that the work has reached substantial completion and is ready for pre-final inspection.

(b) Pre-Final Inspection. Before notifying the Engineer that the work has reached substantial completion, the Contractor shall inspect the project and test all installed items with all of its subcontractors as appropriate. The Contractor shall also submit the following documents as applicable to the work:

(1) All written guarantees required by the contract.

(2) Complete weekly certified payroll records for the Contractor and Subcontractors.

(3) Certificate of Plumbing and Electrical Inspection.

(4) Certificate of Building Occupancy.

(5) Certificate of Soil and Wood Treatments.

917 (6) Certificate of Water System Chlorination. 918 919 **(7)** Certificate of Elevator Inspection and Boiler and Pressure 920 Pipe Inspection. 921 922 (8) Maintenance Service Contract and two copies of a list of all 923 equipment installed. 924 925 Any other final items and submittals required by the contract (9) 926 documents. 927 928 (c) Procedure. When in compliance with the above requirements, 929 the Contractor shall notify the Engineer in writing that the project has 930 reached substantial completion and is ready for pre-final inspection. 931 932 The Engineer will then make a preliminary determination as to 933 whether or not the project is substantially complete and ready for pre-final 934 inspection. The Engineer may, in writing, postpone until after the pre-final 935 inspection the Contractor's submittal of any of the items listed in 936 Subsection 8.13(b) Pre-Final Inspection, herein, if in the Engineer's 937 discretion it is in the interest of the State to do so. 938 939 If, in the opinion of the Engineer, the project is not substantially 940 complete, the Engineer will provide the Contractor a punchlist of specific 941 deficiencies in writing which must be corrected or finished before the work 942 will be ready for a pre-final inspection. The Engineer may add to or 943 otherwise modify this punchlist from time to time. The Contractor shall 944 take immediate action to correct the deficiencies and must repeat all steps 945 described above, including written notification that the work is ready for 946 pre-final inspection.

After the Engineer is satisfied that the project appears substantially complete, a final inspection shall be scheduled within ten working days after receipt of the Contractor's latest letter of notification that the project is ready for final inspection.

If, as a result of the pre-final inspection, the Engineer determines the work is not substantially complete, the Engineer will inform the Contractor in writing as to specific deficiencies which must be corrected before the work will be ready for another pre-final inspection. If the Engineer finds the work is substantially complete but finds deficiencies that must be corrected before the work is ready for final inspection, the Engineer will prepare, in writing, and deliver to the Contractor a punchlist describing such deficiencies.

At any time before final acceptance, the Engineer may revoke the determination of substantial completion if the Engineer finds that it was not warranted and will notify the Contractor in writing the reasons therefore together with a description of the deficiencies negating the declaration.

When the date of substantial completion has been determined by the State, liquidated damages for the failure to complete the punchlist, if due to the State, will be assessed pursuant to Subsection 8.8(b) Liquidated Damages for Failure to Complete the Punchlist.

(d) Punchlist; Clean Up and Final Inspection. Upon receiving a punchlist after substantial completion, the Contractor shall promptly devote all required time, labor, equipment, materials, and incidentals to correct and remedy all punchlist deficiencies. The Engineer may add to or otherwise modify this punchlist until final acceptance of the project.

Before final inspection of the work, the Contractor shall clean all ground, occupied by the Contractor in connection with the work, of all

rubbish, excess materials, temporary structures, and equipment; shall remove all graffiti and defacement of the work; and shall restore all property and facilities that may have been damaged or affected during the course of the work to the original condition, unless otherwise directed by the Engineer. The worksite shall be left in a neat and presentable condition to the satisfaction of the Engineer.

Final inspection will occur within ten working days after the Contractor notifies the Engineer in writing that all punchlist deficiencies remaining after the pre-final inspection have been completed and the Engineer concurs. If the Engineer determines that deficiencies still remain at the final inspection, the work will not be accepted, and the Engineer will notify the Contractor, in writing, of the deficiencies which shall be corrected and the steps above repeated.

If the Contractor fails to correct the deficiencies and complete the work by the established or agreed date, the State may correct the deficiencies by whatever method it deems appropriate and deduct the cost from any payments due the Contractor.

8.14 Final Acceptance.

The procedures described herein shall apply for the entire project if there is a single completion date or to each part of the project for which there is a separate completion date. When there are two or more separate completion dates, "project" as used herein shall refer to each part of the work for which there is a separate completion date. Inspection and acceptance procedures shall be applied as described herein for each part of the project for which there is a separate completion date.

When the Engineer finds that the project has been satisfactorily completed in compliance with the contract, the Engineer will notify the Contractor in writing

of the project's completion and acceptance. The final acceptance date shall determine end of contract time, liquidated damages for failure to complete the punchlist, and commencement of all guaranty periods subject to Section 8.16 Contractor's Responsibility for Work; Risk of Loss or Damage.

8.15 Use of Structure or Improvement. The State has the right to use the structure, equipment, improvement, or any part thereof, at any time after it is considered by the Engineer as available, whether or not substantial completion has been reached. In the event that the structure, equipment, or any part thereof is used by the State before final acceptance, the Contractor is not relieved of its responsibility to protect and preserve all the work until final acceptance.

8.16 Contractor's Responsibility for Work; Risk of Loss or Damage. Until the written notice of final acceptance has been received, the Contractor shall take every precaution against loss or damage to any part of the work from any cause whatsoever, whether arising from the performance or from the non-performance of the work. The Contractor shall rebuild, repair, restore, and make good all loss or damage to any portion of the work resulting from any cause before its receipt of the written notice of final acceptance and shall bear the risk and expense thereof.

The risk of loss or damage to the work from any hazard or occurrence that may or may not be covered by a builder's risk policy is that of the Contractor and Surety, unless such risk of loss is placed elsewhere by express language in the contract documents.

8.17 Guarantee of Work.

(1) Regardless of, and in addition to, any manufacturers' warranties, all work and equipment shall be guaranteed by the Contractor against defects in materials, equipment, or workmanship for one year from the

date of final acceptance or as otherwise specified in the contract documents.

(2) When the Engineer determines that repairs or replacements of any guaranteed work and equipment is necessary due to materials, equipment, or workmanship which are inferior, defective, or not in accordance with the terms of the contract, the Contractor shall, at no increase in contract price or contract time, and within five working days of receipt of written notice from the State, commence to do all of the following:

(A) Correct all noted defects and make replacements, as directed by the Engineer, in the equipment and work.

(B) Repair or replace to new or pre-existing condition any damages resulting from such defective materials and equipment or installation thereof.

(3) The State will be entitled to the benefit of all manufacturers' and installers' warranties that extend beyond the terms of the Contractor's guaranty regardless of whether or not such extended warranty is required by the contract documents. The Contractor shall prepare and submit all documents required by the providers of such warranties to make them effective and submit copies of such documents to the Engineer. If an available extended warranty cannot be transferred or assigned to the State as the ultimate user, the Contractor shall notify the Engineer who may direct that the warranted items be acquired in the name of the State as purchaser.

(4) If a defect is discovered during a guarantee period, all repairs and corrections to the defective items when corrected shall be guaranteed for a new duration equal to the original full guarantee period. The running of

1075 the guarantee period shall be suspended for all other work affected by any 1076 defect. The guarantee period for all other work affected by any such 1077 defect shall restart for its remaining duration upon confirmation by the 1078 Engineer that the deficiencies have been repaired or remedied. 1079 1080 (5) Nothing in this section is intended to limit or affect the State's rights 1081 and remedies arising from the discovery of latent defects in the work after 1082 the expiration of any guarantee period. 1083 1084 8.18 No Waiver of Contract Obligations. None of the provisions of this 1085 contract shall be considered waived by the State unless such waiver is given in 1086 writing by the State. No such waiver shall be a waiver of any past or future 1087 default, breach or modification of any of the terms, provisions, conditions, or 1088 covenants of the contract unless expressly stipulated in such waiver. 1089 1090 The following will not operate or be considered as a waiver of any portion 1091 of the contract, or any power herein reserved, or any right to damages provided 1092 herein or by law: 1093 1094 (1) Any payment for, or acceptance of, the whole or any part of the 1095 work. 1096 1097 (2) Any extension of time. 1098 1099 (3) Any possession taken by the Engineer. 1100 1101 A waiver of any notice requirement or of any noncompliance with the 1102 contract will not be held to be a waiver of any other notice requirement or any 1103 other noncompliance with the contract.

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8.19 Final Settlement of Contract.

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1107	(a)	Closi	ng Requirements. The contract will be considered settled
1108	after t	he proj	ect acceptance date or, after the last acceptance date if there
1109	is mor	e than	one acceptance date for different portions of the project, and
1110	when	the fo	ollowing items have been satisfactorily submitted, where
1111	applic	able:	
1112			
1113		(1)	Two accepted final as-built drawings as specified in
1114		Subse	ection 5.8(a) Drawings and Special Provisions.
1115			
1116		(2)	All written guarantees required by the contract.
1117			
1118		(3)	Complete and certified weekly payrolls for the Contractor
1119		and its	s subcontractors.
1120			
1121		(4)	Certificate of plumbing and electrical inspection.
1122			
1123		(5)	Certificate of building occupancy.
1124			
1125		(6)	Certificate for soil treatment and wood treatment.
1126			
1127		(7)	Certificate of water system chlorination.
1128			
1129		(8)	Certificate of elevator inspection and boiler and pressure
1130		pipe ir	nstallation.
1131			
1132		(9)	Certificates of Compliance for employment of State of Hawaii
1133		reside	ents by Contractor and applicable subcontractors per Section
1134		7.2 Er	mployment of State of Hawaii Residents.
1135			
1136		(10)	Tax clearance.
1137			
1138		(11)	All other documents required by the Contract or by law.

1140 **(b)** Failure to Meet Closing Requirements. The Contractor shall meet the applicable closing requirements within 60 days from the date of Project Acceptance or the agreed to Punchlist complete date. Should the Contractor fail to comply with these requirements, the Engineer may terminate the contract for cause.

1146 END OF ARTICLE VIII

ARTICLE IX - MEASUREMENT AND PAYMENT

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9.1 Schedule of Values. After the award of contract, the Contractor shall submit a schedule of prices (Schedule of Values) for each of the various items of work paid for by a lump sum price. For projects involving more than a single building, structure, or facility, the breakdown cost shall reflect a separate schedule of prices for the various items of work for each building, structure, and facility. The sum of the prices submitted for the various items must equal the lump sum bid in the bidder's proposal. This schedule of values will be subject to acceptance by the Engineer who may require the bidder to submit another or several other schedules if, in the Engineer's opinion, the prices are unbalanced or not sufficiently detailed. The Engineer is not bound by any cost proposal schedule in the bid documents in determining if the schedule of values is sufficiently detailed or balanced; the accepted schedule of values shall supersede any bid proposal schedule. This schedule of values (1) shall be used for the purpose of determining the value of monthly payments due the Contractor for work installed complete in place and (2) may be used as the basis for determining cost and credit of added or deleted items of work, respectively.

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As a condition of payment, the Contractor shall estimate, at the close of each month, the percentage of work completed under each of the various construction items during such month and submit the estimate to the Engineer for review and approval. The Contractor shall be paid the percentage of the price, as approved by the Engineer, established for each item less any permissible retention.

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9.2 Payment is not Acceptance. No payment made to the Contractor prior to final acceptance is an acceptance by the State of the work or the portion of the work related to the payment; nor does a progress payment affect the State's rights to inspect, test, or reject the work. A progress payment does not relieve the Contractor of the risk of loss or damage to the work for which payment is made. The Contractor still maintains the responsibility and duty with respect to

the work for which payment is made, to protect against loss or damage, to insure the work, to insure and indemnify the State against claims, to maintain the required surety bonds, and to protect the work and the public.

9.3 Measurement of Quantities.

(a) Measurements; Disputes. The work will be measured in accordance with United States standard measure or as otherwise stated in this contract. Final measurement shall be verified or determined by the Engineer. If the Contractor has a dispute about the measurement of the work, the Contractor must demonstrate the existence of an error by actual physical measurement before the work has progressed in a manner that would make a proper verification of the contested measurements impractical. If the Contractor's claim cannot be physically verified, the Engineer's measurements will be deemed as correct.

(b) Methodology. Longitudinal measurements for area computations of the various surfaces will be made in the horizontal projection of the actual surface. Transverse measurements for area computations will be the neat dimensions shown in the contract documents or the horizontal projection of the actual surface or as ordered in writing by the Engineer. No deductions in measurement for unit price payment purposes will be made for fixtures or structures in place having a combined area of nine square feet or less.

Work will be measured to the pay limits shown in the contract documents.

Measurement of items that are measured by the linear foot will be made parallel to the base or foundation.

Every vehicle hauling material specified for measurement and payment by "loose measurement" or "measurement by vehicle" shall be

made available to the Engineer for verification of its load volume or capacity. A vehicle's full load shall be its water level capacity. The Engineer may direct that any load in a vehicle be leveled for purposes of measurement or payment.

The Contractor shall notify the Engineer 24 hours before hauling material payment for which is based upon weight. Unless otherwise directed by the Engineer, the truck used to haul material paid by weight shall be weighed with no load on a properly certified scale before each load is added.

The following items will not be paid for and such quantities will be deducted from the final total measured quantities:

(1) Quantities of material wasted or disposed of in a manner not called for under the contract;

(2) Rejected material, including material rejected after it has been placed by reason of the failure to conform to the provisions of the contract;

(3) Material not unloaded from the transporting vehicle;

(4) Material placed outside of the lines indicated on the plans or given by the Engineer; or

(5) Material remaining on hand after completion of the work.

No compensation will be allowed for hauling any above-described material to or from the site.

(c) Standards and Definitions. When identifying standard manufactured items by gage, unit weight, or section dimensions, such identification will be nominal weights or dimensions. Standard manufactured items shall be such items as fence, wire, plates, rolled shapes, and pipe conduit. Unless specific allowable tolerances are set by the contract documents, tolerances generally accepted or established by the industries involved in the manufacture of the product are acceptable.

A station, when used as a definition or term of measurement, is 100 linear feet.

The term "gage" refers to the U. S. steel wire gage or U.S standard gage for uncoated hot and cold rolled sheets.

The term "ton" will mean the short ton of 2,000 pounds avoirdupois weight. The Contractor shall weigh materials measured or proportioned by weight on properly certified scales.

9.4 Full Compensation; **Changes.** The contract price is full compensation for the work.

Change order work as described in Section 4.5 Contract Change Orders, shall be paid for in the manner established by the related change order.

The total price adjustment as specified in the field order or the change order shall be considered full compensation for all materials, labor, insurance, bonds, fees, taxes, equipment use or rental, profit and all overhead, and any delay impact costs.

9.5 Allowances for Overhead and Profit. In determining the cost or credit to the State resulting from a change, the allowances for all overhead, including extended overhead resulting from adjustments to contract time (including home

office, branch office, and field overhead and related delay impact costs) and profit combined, shall not exceed the percentages set forth below:

(1) 20 percent of the direct cost for any work performed by the Contractor's own labor force.

(2) 20 percent of the direct cost for any work performed by each subcontractor's own labor force.

(3) For the Contractor or any subcontractor for work performed by their respective subcontractor or tier subcontractor, 10 percent of the amount due to the performing subcontractor or tier subcontractor.

(a) Allowance Percentages. The allowance percentages will be applied to all credits and to the net increase of direct costs where work is added and deleted by the changes.

(b) Allowed Markup. Not more than three markup allowance line item additions not exceeding the maximum percentage noted in Subsections 9.5(1), 9.5(2), and 9.5(3) are allowed for profit and overhead, regardless of the number of tier subcontractors.

9.6 Force Account Provisions and Compensation. The contract documents may provide that certain work be compensated by force account method, or the Contractor may be directed to provide changes compensable under the price adjustment provision Subsection 4.6(a)(5). When performing force account work, the Contractor and its subcontractor(s) shall comply with the provisions of this section. Compensation by force account will not alter any rights, duties, and obligations under the contract. The Contractor shall follow these procedures:

(a) The Contractor's Duties; Engineer's Authority. The Contractor has the duty to perform the work payable under this provision efficiently and economically. When the Engineer determines the Contractor is working inefficiently or uneconomically, the Engineer may direct the Contractor to stop, modify its means and methods, or the Engineer may specifically direct means and methods of doing the force account work. The Engineer will not pay for work that is unacceptable or for the cost of correcting work that fails to conform to contract requirements.

(b) Records. The Contractor shall maintain accurate daily records of all allowable costs. The records, as well as all work and costs, are subject to review, audit, and approval by the Engineer.

The Contractor shall use the State's Force Account Form and obtain the Inspector's signature thereon each day the Contractor performs force account work. As the condition of payment of the force account work, the Contractor shall submit an original and two copies of the force account records, together with invoices, receipts, and other backup data to the Engineer.

(c) Allowable Costs. Allowable costs include labor, equipment and machinery, trucks, insurance, taxes and bonds, overhead, profit, and reimbursable expenses all as described herein. Other costs or items not covered under this section are subject to the Engineer's written approval.

(d) Labor. Allowable costs include Contractor and subcontractor(s) costs for hourly worker wages, and fringe benefits required by employment contracts, plus overhead and profit markup. The Contractor shall provide the information on the force account form regarding each worker and supervisor.

Overtime compensation, per diem costs, and other reimbursable costs are not allowed unless approved in writing by the Engineer prior to incurring the expense. Overhead and profit markup will not be allowed for such costs. Costs and time for employees to travel to and from the project site are not allowed unless approved in writing by the Engineer prior to performing the work.

(e) Materials. Contractor and subcontractor(s) are allowed the actual cost of materials (excluding financing costs) delivered and incorporated into the work plus overhead and markup. The Contractor shall provide descriptions and quantities of materials, prices, and extensions and costs to transport materials if not included in the prices of the materials. The Contractor shall provide legible receipts and invoices for all materials used and transportation charges. The Contractor shall promptly inform the Engineer of any early payment discounts that are available, as well as scheduled or anticipated price increases.

If materials used are not specifically purchased for the force account work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall certify that the materials were taken from stock and that the amount claimed represents the actual cost to the Contractor.

(f) Equipment and Machinery. For equipment and machinery necessary and actually used (other than small tools defined under Subsection 9.6(i) Small Tools) that are owned or leased or rented, the Contractor is allowed costs for use of equipment or machinery at a per hour rate.

Hourly rates shall include costs for fuel, oil, lubricants, supplies, necessary attachments, repairs, maintenance, tire wear, depreciation, storage, and other incidentals. The allowable hourly rates shall be the

Contractor's actual customary charges, e.g., shop rates, yard rates, or rental cost as verified by Contractor's records or invoices, provided that the maximum rate shall not exceed the current rates published in the Blue Book, effective at the time of equipment use. Blue Book hourly rates are calculated based upon the following formula:

Hourly Rates = [(Blue Book Monthly Rate \div 176) X (Regional Adjustment Factor) X (Rate Adjustment Table Factor)] + Hourly Operating Cost

Equipment and machinery costs are not subject to any additional overhead and profit markup.

Equipment and machinery shall be in good condition and suitable for the purpose for which the equipment and machinery are to be used.

For equipment and machinery that is not listed in the Blue Book, the Contractor shall obtain the Engineer's written approval of the monthly and hourly rates prior to using the equipment or machinery. If there is no agreement on the rates, the Engineer will set the rate. Engineer may, prior to the use of rental equipment, approve in writing rates that are higher than the published rates, if justified by special circumstance.

(g) Equipment Charges. The rental period for equipment and machinery brought to the work site, specifically for the force account work, begins when the equipment or machinery reaches the work site, continues each day the equipment or machinery is at the site, and terminates at the end of the day when the equipment or machinery is no longer needed for the force account work or when the equipment or machinery leaves the project site, whichever comes first.

Rental times for all other equipment and machinery used for force account are paid for the time actually used. Prior to the performance of work, the Engineer must approve any hours of operation in excess of 8 hours in any one day. No additional premium beyond the normal rates used will be paid for equipment or machinery over 8 hours per day or 40 hours per week.

The total of all force account rental charges minus the operating cost accrued over the duration of the contract for a specific item of equipment or machinery (same make, model, or kind of equipment or machinery doing the same kind of force account work) shall not exceed the replacement cost of that equipment. The Contractor shall provide the cost of replacement to the Engineer prior to using the equipment or machinery. If the Engineer does not agree with the replacement cost provided by the Contractor or if the Contractor does not provide the replacement cost, the Engineer shall set the replacement cost. The Contractor may contest the replacement cost set by the Engineer in accordance with Section 7.16 Disputes and Claims. The Engineer will pay only the hourly operating cost should the replacement cost be reached. This provision shall not apply to the accrued rental charges for barricades and other traffic control devices.

Rental times are not allowed or credited for any time during which equipment or machinery is inoperative due to its breakdown.

(h) Idle and Standby Equipment. In the event the equipment or machinery must standby due to work being delayed or halted by reasons beyond the Contractor's control, the rental rate shall be: Standby/Idle Hourly Rental Rates = [(Blue Book Monthly Rate ÷ 176) X (Regional Adjustment Factor) X (Rate Adjustment Table Factor)] X 0.50 or the Contractor's shop rates or yard rates, whichever is lower. The Engineer may order the demobilization of standby/idle equipment or may direct that

equipment that was located at the jobsite at the start of the force account work cease to be used for force account work.

Payment will be made only when:

The Contractor has notified the Engineer in writing at the beginning of the standby/idle period that compensation is expected

for the individual piece of equipment or machinery.

(2) The Contractor submits to the Engineer on each Monday a list of the equipment or machinery that was idle the past week. This list shall have all information necessary to determine the hourly rental rate and the date and time it became idle and the reason for the equipment or machinery being idle. The list shall also have the date and time when any maintenance was performed on the equipment or machinery during the period the equipment was idle.

With the written approval of the Engineer, the Contractor may store the idle equipment or machinery on the project site for its own convenience at no increase in contract price or contract time.

(i) Small Tools. Contractor and subcontractor(s) are not allowed costs for depreciation or use of small tools, even if the small tools are consumed by use. Small tools are individual pieces of equipment, tools, or other items having a purchase price for that new item or equivalent replacement value of \$500.

(j) Trucks and Utility Items. The Contractor's cost for utility vehicles and other items such as pickup trucks, vans, flatbed trucks, storage trailers, containers, etc. that are already in use or planned for use on the entire project will not be allowed except for the time that, in the

opinion of the Engineer, they: (1) are directly and necessarily used for the performance of the force account work; and (2) the use of such items has not been included within the Contractor's total project overhead costs.

Allowable rental rates for trucks not owned or leased by the Contractor shall not exceed the listed rates in the Blue Book or those established under the Hawaii State Public Utilities Commission, whichever is less.

The Contractor shall provide points of origin, destinations, mileage, and hourly rates for each travel segment.

Payment for use of trucks shall be in accordance with the provisions of Subsection 9.6(f) Equipment and Machinery.

(k) Transportation, Mobilization, and Demobilization. The Contractor shall obtain the Engineer's approval of the location from which the equipment or machinery will be moved or transported.

Where the equipment or machinery must be transported to the work site, the Contractor will be paid the reasonable costs to mobilize and demobilize, load and unload, and transport the equipment or machinery to and from its original location to the work site or, upon completion of the work, to another location, whichever cost is less.

The cost to transport the equipment or machinery shall not exceed the rates established by the Hawaii State Public Utilities Commission. If the rates are nonexistent, then the rates will be determined by the Engineer based upon the prevailing rates charged by established haulers within the locale.

If the Contractor uses the equipment or machinery for other than force account work, the costs to mobilize and transport may be disallowed or prorated depending on the non-force account work.

(I) Subcontractors. Subcontractor's costs are allowed plus a markup limited under Section 9.5 Allowances for Overhead and Profit and applicable State excise tax. Costs for insurance and taxes shall comply with the provisions of Subsections 9.6(m) Insurance and Taxes.

(m) Insurance and Taxes. Contractor and subcontractor(s) are allowed actual additional costs attributable exclusively to the force account work for insurance premiums for property damage, liability and workers compensation insurance, State unemployment contributions, Federal unemployment taxes, Social Security and Medicare taxes, plus an allowable markup of 6 percent.

(n) Other Costs. Any other costs or items not covered under this Section 9.6 Force Account Provisions and Compensation are subject to the Engineer's written approval and conditions.

(o) Reimbursable Expenses. All costs are subject to Section 3-123, H.A.R., Cost Principles. Reimbursable expenses are subject to the Engineer's written approval and conditions. Overhead and profit markups are not permitted on reimbursable expenses.

Costs incurred by the Contractor for air transportation and associated ground transportation and per diem or subsistence allowance costs (lodging and meals) are allowed as reimbursable expenses when the project conditions require special skilled workers not readily available on the island of the project site. Air transportation shall not exceed the actual cost of coach class airfare. Whenever possible, Contractor shall take advantage of advance purchase discount air fares. Ground

transportation shall not exceed the actual cost of renting a compact-sized vehicle. Rental vehicles shall be shared among Contractor's employees to the greatest extent possible. Insurance coverage is not a reimbursable expense.

Per diem or subsistence costs (lodging and meals) shall not exceed the applicable daily authorized rates for inter-island or out-of-state travel for State government employees. No per diem is allowed for leaving and returning the same day. The Contractor shall obtain prior written approval from the Engineer for other conditions.

(p) State Excise Tax and Bond. The Contractor will be reimbursed for State excise taxes paid or payable on the allowable force account work. The State shall pay increased premiums only on the bonds the Contract requires the Contractor to maintain for the work. No additional premium costs shall be paid for bonds not required by the Contract or for bonds acquired or maintained by any subcontractor.

The actual bond premium, not to exceed 1 percent is allowed on items covered by Subsections 9.6(d) Labor, 9.6(e) Materials, 9.6(f) Equipment and Machinery, 9.6(j) Trucks and Utility Items, 9.6(l) Subcontractors, 9.6(m) Insurance and Taxes, 9.6(n) Other Costs, and 9.6(o) Reimbursable Expenses when applicable. When the original contract price includes a bond premium for an allowance item to be paid by force account, no additional bond premium for such allowance items will be paid until the allowance amount is exhausted.

9.7 Assignment of Payments. The Contractor may not assign its right to receive monies due under the contract without the written consent of the State and the surety.

9.8 Progress Payments.

(a) Monthly Payment. The Contractor shall be paid progress payments monthly upon approval of a monthly payment estimate by the Engineer. The monthly payment estimate shall be based upon the value of the items of work that appear to be satisfactorily completed, including the value of materials incorporated in the work. Materials not yet incorporated in the work will be paid in accordance with Subsection 9.8(b) Payment for Material On Hand. Monthly payments will be approximate only and shall be subject to correction before or in the final payment. Monthly shall mean the period between the first day of the month to the last day of the month. The Engineer and the Contractor may agree on a different monthly period.

The Engineer may withhold all or any part of a monthly payment due to the Contractor, without interest accruing on account of:

- (1) The failure of the Contractor to meet a requirement of law or the contract that is a condition precedent of payment.
- (2) The exercise of any right granted the Engineer to withhold money due the Contractor established by law or the contract.

No monthly payment will be made if the total value of the work done since the last estimate is less than \$2,000.

- **(b)** Payment for Material On Hand. The Contractor will be paid the manufacturer's, supplier's, distributor's, or fabricator's invoice cost of materials not yet incorporated into the work on the following conditions:
 - (1) If acceptance of submittals of such materials are required by the contract documents, the submittal processes have been

445 completed and the materials for which payment is requested 446 conform to the accepted submittal. 447 448 The materials shall be stored and handled in accordance (2) 449 with Section 5.14 Storage and Handling of Materials and 450 Equipment. 451 Payments shall be made only if: 452 (3) 453 454 (A) All materials are acceptable to the Engineer. 455 456 (B) Contractor provides legible documentary evidence 457 that all materials for which payment is requested have been 458 paid in full. 459 460 (C) The materials are insured for their full replacement 461 value to the benefit of the State against theft, fire, damages 462 incurred in transportation to the site, and other hazards. 463 464 (D) In case of materials stored off the project site, the 465 materials are clearly marked and identified for the project 466 and are not commingled with other materials not to be 467 incorporated into the project. 468 469 The payment authorized in this subsection will not exceed the 470 contract price of that item. Payment for the material under this subsection 471 is not final acceptance of the material nor shall any such payment shift the 472 risk of loss or damage from the Contractor to the State. 473 474 Payment for the material does not relieve the Contractor of its 475 obligations to furnish material acceptable to the Engineer and to properly incorporate the material into the project in accordance with the contract documents.

The State will not make material payment on living or perishable plant material or any material that may deteriorate or is not insurable.

9.9 Prompt Payment.

(a) Contractor's Duty.

(1) When any subcontractor has met all the terms and conditions of the subcontract, and there are no bona fide disputes, the Contractor, upon receiving payment from the State for the work, shall make full payment to the subcontractor of all monies due within 10 days from the receipt of an invoice from the subcontractor. Upon final payment to the Contractor, full payment to the subcontractor shall include all retainage amounts due. This payment obligation applies to payments made to and payable to all tiers of subcontractors.

(2) Bona Fide Disputes. The existence of a bona fide dispute with a subcontractor or material supplier shall not release the Contractor of its prompt payment obligations as to all sums due that are not directly affected by such disputes.

The following are examples of 'bona fide disputes':

(A) When work done by a subcontractor is paid for and later found to be non-conforming or unacceptable and the amount previously paid by the State is deducted from the Contractor's subsequent payment request.

508	(B) When the Contractor and subcontractor disagree as		
509	to whether the subcontractor has failed to promptly correct		
510	any deficiencies or non-conforming work.		
511			
512	(C) When the Contractor and subcontractor disagree as		
513	to whether the subcontractor has failed to fulfill any material		
514	term, condition, or requirement of its subcontract.		
515			
516	(b) Filing Of Non-Payment Complaint And Verification Of Its		
517	Validity. Subcontractors and material suppliers may file, in writing, a		
518	complaint with the Engineer regarding non-payment by the Contractor.		
519	Such a complaint must state:		
520			
521	(1) The amount past due for work performed and already paid		
522	for by the State;		
523			
524	(2) The date the work was completed;		
525			
526	(3) The date payment was due from the Contractor;		
527			
528	(4) That all the terms, conditions, or requirements of its		
529	subcontract have been met; and		
530			
531	(5) That no bona fide dispute over its performance exists.		
532			
533	The Engineer will investigate, hear and receive evidence, and		
534	determine the validity of the complaint, and the Engineer's decision on the		
535	matter shall be final. It is not the Engineer's responsibility to determine		
536	how a bona fide dispute should be resolved.		
537			
538	(c) Follow-Up Action. If the Engineer determines that the		
539	Contractor failed to make prompt payment required under the subcontract		

540 or these contract documents to a subcontractor or material supplier with 541 whom the Contractor has no bona fide dispute within the time period 542 specified above, the Engineer shall inform the Contractor of the findings 543 and direct the Contractor to make payment accordingly. 544 545 If the Contractor does not act promptly, the Engineer may do any or 546 all of the following including: 547 548 (1) Withholding from future progress payment amounts to cover 549 any sums paid to the Contractor for work performed by a 550 subcontractor if the State finds that the subcontractor's complaint 551 regarding non-payment by the Contractor has merit. 552 553 **(2)** Refer the matter to the Contractor Licensing Board for 554 appropriate action. 555 556 (3) Initiate a petition for debarment. 557 558 (d) The Contractor will be subject to a penalty of one and Penalty. 559 one-half percent per month upon outstanding amounts due that were not 560 timely paid by the Contractor under the following conditions. 561 562 Where a subcontractor has provided evidence to the Contractor of 563 satisfactorily completing all work under their subcontract and has provided 564 a properly documented final payment request, and: 565 566 (1) Has provided to the contractor an acceptable 567 performance and payment bond for the project executed by a surety 568 company authorized to do business in the State; or

The following has occurred:

(2)

569

570

- (A) A period of ninety days after the day on which the last of the labor was done or performed and the last of the material was furnished or supplied has elapsed without written notice of a claim given to contractor and the surety, as provided for in section 103D-324: and (B) subcontractor has provided
 - (B) The subcontractor has provided to the Contractor an acceptable release of retainage bond, executed by a surety company authorized to do business in the State, in an amount of not more than two times the amount being retained or withheld by the Contractor; any other bond acceptable to the Contractor; or any other form of mutually acceptable collateral,

then, all sums retained or withheld from a subcontractor and otherwise due to the subcontractor for satisfactory performance under the subcontract shall be paid by the Engineer to the Contractor and subsequently, upon receipt from the Engineer by the Contractor, to the subcontractor within ten days after receipt of payment from the Engineer.

The penalty may be withheld from future payment due to the Contractor if the Contractor was the responsible party. If a Contractor has a violation three or more times within two years of the first violation, the Contractor shall be referred by the Engineer to the Contractors License Board for action under Section 444-17(14), HRS.

(e) Documented Subcontractor Final Payment Request. A properly documented final payment request from a subcontractor shall include:

604		(1)	Substantiation of the amounts requested;
605			
606		(2)	A certification by the subcontractor, to the best of the
607		subco	ntractor's knowledge and belief, that:
608			
609			(A) The amounts requested are only for performance in
610			accordance with the specifications, terms, and conditions of
611			the subcontract;
612			
613			(B) The subcontractor has made payments due to its
614			subcontractors and suppliers from previous payments
615			received under the subcontract and will make timely
616			payments from the proceeds of the payment covered by the
617			certification, in accordance with their subcontract
618			agreements and the requirements of this section; and
619			
620			(C) The payment request does not include any amounts
621			that the subcontractor intends to withhold or retain from a
622			subcontractor or supplier in accordance with the terms and
623			conditions of their subcontract.
624			
625		(3)	The submission of documentation confirming that all other
626		terms	and conditions required under the subcontract agreement
627		have b	peen fully satisfied.
628			
629		The E	Engineer shall return any defective final payment request,
630	along	with a	statement identifying the defect, to the Contractor within
631	seven	days a	fter receipt.
632			
633	(f)	Additi	onal Subcontract Terms and Conditions.

This section shall not be construed to impair the right of a contractor or a subcontractor, at any tier, to negotiate and to include in their respective subcontracts provisions that provide for additional terms and conditions that are requested to be met before the subcontractor shall be entitled to receive final payment, provided that any such payments withheld shall be withheld by the Engineer.

9.10 Retainage; Withholding of Payment for Unsatisfactory Progress.

(a) Retainage. If the Engineer finds that satisfactory progress is being made, an amount equivalent to 5 percent of the first 50 percent of the whole will be deducted from the total of the amounts ascertained as payable and will be retained by the Department until after completion of the entire contract in an acceptable manner. After 50 percent of the work has been completed, the Department shall make any of the remaining progress payments in full provided progress is satisfactory.

(b) Withholding of Payment for Unsatisfactory Progress. If the Contractor is progressing or performing the work unsatisfactorily, the Engineer, upon written notice to the Contractor, may withhold sums not exceeding 5 percent of the total contract price from subsequent progress payments.

The Engineer may deduct, from any amounts due to the Contractor, sums assessed as liquidated damages as well as any other charges against the Contractor allowed by law or the contract documents.

If the Contractor refuses or fails to comply with the laws and regulations dealing with equal employment opportunity, affirmative action, non-discrimination, labor compliance, implementing and maintaining the BMP and NPDES standards, and disadvantaged business enterprise requirements, the Engineer, at its sole discretion and upon written notice

to the Contractor, may withhold any or all of the monthly progress payments that are due or to become due.

With the approval of the State, the Contractor may withdraw, from time to time, the whole or any portion of the sum withheld after endorsing over to the State and depositing with the State any general obligation bond of the State or its political subdivisions suitable to the State. But in no case will the bond have a face value less than the value of the amount to be withdrawn. The State may sell the bond and use monies directly withheld from progress payments or the final payment.

9.11 Final Payment. The Engineer will prepare the final estimate when the State accepts the project in accordance with Section 8.14 Final Acceptance. Prior progress estimates and payments shall be subject to correction in the final estimate and payment.

Upon final settlement, the State will pay the entire sum due, less all previous payments and less any sums that may have been or may be deducted in accordance with the provisions of the contract, upon receipt of the following documents in a format acceptable to the Engineer:

(1) Consent of the surety to payment of the final estimate and certificate of release from the surety.

(2) Evidence by affidavit that the Contractor fully paid the debts resulting from the contract.

(3) A current "Certificate of Vendor Compliance" issued by the Hawaii Compliance Express (HCE). The Certificate of Vendor Compliance is used to certify the Contractor's compliance with (a) Section 103D-328, HRS (for all contracts \$25,000 or more) which requires a current tax clearance certificate issued by the Hawaii State Department of Taxation and the

Internal Revenue Service; (b) Chapters 383, 386, 392, and 393, HRS; and (c) Subsection 103D-310(c), HRS. The State reserves the right to verify that compliance is current prior to the issuance of final payment. Contractors are advised that non-compliance status will result in the rejection of the submission and the final payment being withheld until compliance is attained.

Sums necessary to meet the claims of any governmental agencies may be withheld from the sums due the Contractor until said claims have been fully and completely discharged or otherwise satisfied.

9.12 Records, Accounts, And Documents. The Contractor shall retain and preserve its bid documents and estimates, contract records, accounts, data, and documents of the Contractor and its subcontractors, including all records regarding the employment of State of Hawaii residents, for not less than three years from the date of final payment. If any lawsuit or claim relating to the work is pending before the expiration of the three year period, the Contractor shall retain the documents until it is resolved. The Contractor shall provide written notice to the Engineer not less than 30 days of its intent to dispose of the contract records. The Engineer may direct, in writing, the Contractor to retain such records for an additional period of time at no cost to the State. The documents shall be available for inspection and auditing by the State and other government agencies at the offices of the Contractor and its subcontractors upon 24 hours notice to the Contractor. The Contractor shall cooperate during such inspection and auditing of the documents at no cost to the State.

END OF ARTICLE IX.